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10/829,168	04/22/2004	Toshiharu Ueno	0879-0441PUS1	5767
2292	7590	12/13/2007	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH			PATEL, KAUSHIKKUMAR M	
PO BOX 747			ART UNIT	PAPER NUMBER
FALLS CHURCH, VA 22040-0747			2188	
NOTIFICATION DATE		DELIVERY MODE		
12/13/2007		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

[mailroom@bskb.com](mailto:mailroom@bskb.com)

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/829,168	UENO, TOSHIHARU
	Examiner Kaushikkumar Patel	Art Unit 2188

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 03 October 2007.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-13 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-13 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 22 April 2004 is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date _____                                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Amendment***

1. This Office Action is in response to applicant's communication filed October 03, 2007 in response to PTO Office Action mailed April 04, 2007. The applicant's remarks and amendments to the claims and/or specification were considered with the results that follow.
2. In response to last Office Action, claims 1, 2 and 5-10 have been amended. No claims have been canceled. Claims 11-13 have been added. As a result, claims 1-13 remain pending in this application.

### ***Response to Arguments***

3. Applicant's arguments filed October 3, 2007 have been fully considered, but they are not persuasive. Applicant argues that Lakhani teaches disabling method to suppress user access to defective memory blocks, but he does not teach or suggest disabling remaining pages in the first block when said step allocates the frequently changing information. However, the teaching of Lakhani is only relied upon to teach disabling the blocks to prevent inadvertent access to a block and Chiba is clear in teaching that when a specific area is allocated to frequently changing information and if the information is processed in form of blocks, such that it prevents a small amounts of writes to a block which stores frequently changed information (Chiba, col. 17, line 64 - col. 18, line 5), "Because the sizes of the FAT and directory are set to the same size as a single block, the FAT and directory are stored exactly in a block. Therefore, it is

Art Unit: 2188

possible to prevent a small amount of data which is a part of a file or directory from being stored in a part of the block a single write-in processing", here it clear that data other than FAT data is not allowed to be stored in FAT area and since data is written and erased in units of blocks, essentially the unused portion of the block is not used for storing small amount of data and this feature is well known in the art as "internal fragmentation".

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1-13 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The examiner was unable to find support for the newly added limitation "allocating a specific area having frequently changing information to a first block of the plurality of blocks", as such the limitation added can be considered to be a new matter and applicant is advised to remove newly added limitation or provide a proper support in the originally filed disclosure.

Claims 2-13 are also rejected due to dependency on rejected claim.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 2, 5, 8, 11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chiba (US 6,411,552) and further in view of Lakhani et al. (US 7,123,512).

As per claim 1, Chiba teaches a method of recording and reproducing information in which a recording area of a recording medium is physically divided into plurality of blocks and each block is partitioned into plurality of pages (fig. 1, item 1, fig. 2 shows recording medium is divided into blocks and blocks are further divided into pages, also col. 5, lines 50-60, col. 2, lines 27-30, data erasing is carried out in units of one block, col. 17, line 65 – col. 18, line 5), the method comprising step of:

recording and erasing information in at least one the pages in units of blocks (Chiba, col. 2, lines 27-29);

allocating a specific area having a frequently changing information to a first block of the plurality of block (col. 9, lines 36-37, "the number "1" is always allocated to a block in which the FAT is stored") (col. 16, lines 37-47, blocks are allocated to FAT in which information changes frequently, information written-in and erased as a unit of block, col. 2, lines 26-47, "the position information and identification name are stored in a single cluster or a single block, therefore the necessity of saving other data for

Art Unit: 2188

updating these data is eliminated and thus the data write-in or erase processing can be carried out rapidly" and Chiba further teaches marking FAT area so other user data can not be written in area for management information, Chiba, col. 19, lines 48-60), thus Chiba teaches limitation of allocating the specific area of blocks and remaining portion (remaining pages) stays unused.

Chiba teaches allocating block as a unit and remaining unallocated portion stays unused and also teaches preventing user from accessing blocks allocated to FAT (management information) but fails to teach disabling of remaining unused area of block (remaining unused pages). Lakhani teaches method of disabling defective pages in the block (Lakhani, col. 12, lines 3-5). It would have been obvious to one having ordinary skill in the art at the time of the invention to utilize method of disabling pages of blocks as taught by Lakhani in the system of Chiba to prevent inadvertent access to the pages of blocks specifically allocated to management information by disabling unused (or defective) pages in the block (Lakhani, col. 12, lines 10-11).

As per claim 2, Chiba teaches the frequently changing information is at least one of managing data recorded in the medium, FAT and root directory (Chiba, fig. 4, col. 16, lines 37-46, col. 19, lines 47-61).

As per claim 5, Chiba teaches upon recording of information into the recording medium, allocating the block being unused to logical space and recording information into the block (Chiba, col. 14, line 44 – col. 15, line 24);

reading and modifying contents of the data management area in the recording medium; recording the modified data management area into another unused block in

Art Unit: 2188

the recording medium (Chiba col. 15, lines 25-30, col. 13, line 60 – col. 14, lines 17); and erasing the data management area before modified, and turning the block where the data management area before modified has resided into the block unused (Chiba, col. 14, lines 24-42, where it is readily apparent that the erase block turned into unused block).

As per claim 8, Chiba teaches all the limitation as explained with respect writing data in recording medium as explained with respect to rejection of claim 3 above, Chiba teaches erasing the information from recording medium (Chiba, col. 13, line 45 – col. 14, line 42) satisfying all the limitations of claim 8.

As per claim 11, Chiba teaches recording area ( $0 \times 55$ ) is recorded into area management information in the page corresponding to FAT area (Chiba, col. 19, lines 55).

As per claim 13, Chiba teaches that allocating the specific area distinguishes the specific area having frequently changing information from ordinary data area, so as to reduce amount of data modification of specific area (Chiba, col. 19, line 55, col. 2, lines 26-31).

8. Claims 3-4, 6-7, 9-10, 12/5/2/1, 12/6/3/1 and 12/7/4/2/1 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chiba (US 6,411,552) and Lakhani et al. (US 7,123,512) as applied to claims 1, 2 and 5 above, and further in view of Estakhri et al. (US 6,978,342).

Art Unit: 2188

With respect claims 3 and 4, Chiba and Lakhani teaches all the limitations of claims 1 and 2 and further teaches area for management information and user area (Chiba, figs. 16 and 17), but fails to teach pages provided with area for recording information indicating area allocated, area unused, area disabled as required by claims 3 and 4. Estakhri teaches various flags to mark pages as unused, used, defective etc. (Estakhri, fig. 11). It would have been obvious to one having ordinary skill in the art at the time of the invention to utilize flags as taught by Estakhri in the system of Chiba and Lakhani to improve performance by providing rapid access to stored data (Estakhri, col. 3, lines 44-55, col. 4, lines 5-30).

Claims 6-7 and 9-10 are also rejected under same rationales as applied to claims 5 and 8 above.

As per claim 12, Estakhri teaches recording a logical address in a logical address part (Estakhri, fig. 1).

### ***Conclusion***

9. The examiner also requests, in response to this Office action, support be shown for language added to any original claims on amendment and any new claims. That is, indicate support for newly added claim language by specifically pointing to page(s) and line no(s) in the specification and/or drawing figure(s). This will assist the examiner in prosecuting the application.

10. When responding to this office action, Applicant is advised to clearly point out the patentable novelty which he or she thinks the claims present, in view of the state of the

Art Unit: 2188

art disclosed by the references cited or the objections made. He or she must also show how the amendments avoid such references or objections See 37 CFR 1.111(c).

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

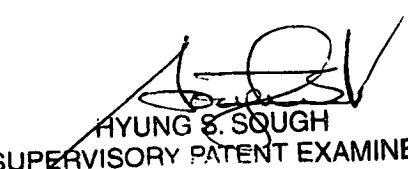
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kaushikkumar Patel whose telephone number is 571-272-5536. The examiner can normally be reached on 8.00 am - 4.30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung Sough can be reached on 571-272-6799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kaushikkumar Patel  
Examiner  
Art Unit 2188

  
kmp

  
HYUNG S. SOUGH  
SUPERVISORY PATENT EXAMINER  
12/07/07